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#### Binder et al.

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# (54) METHOD AND SYSTEM FOR PROVIDING DC POWER ON LOCAL TELEPHONE LINES

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See application file for complete search history.

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#### (57) ABSTRACT

A system for providing DC power on local telephone lines, such as telephone lines in a building or office, for powering devices and circuitry associated with communications over those telephone lines, as well as other functions. Desired voltage and power levels are supplied over local telephone lines by separating the DC power component from the central office or private branch exchange with a DC blocking filter while passing all AC telephony signals. A distinct DC power is then imposed over the telephone line for powering both the telephony service as well as other loads. Conventional telephone off-hook detection is simulated for compatibility with the central office or private branch exchange. The functions required may be integrated, partially or fully within a telephone outlet.

#### 41 Claims, 12 Drawing Sheets

